#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

## WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-016509 Address: 333 Burma Road **Date Inspected:** 21-Aug-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Zhu Feng No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No Yes No N/A **Delayed / Cancelled:** 

**Bridge No:** 34-0006 **Component:** Tower & OBG Components

**Summary of Items Observed:** 

On this date Caltrans Office of Structural Materials Quality Assurance Inspector, Sandeep Kumar (QA) was present during the times noted above for observations relative to the work being performed.

## **TOWER JETTY**

This QA Inspector observed the following work in progress

Shielded Metal Arc Welding (SMAW):

Weld joint #4B located on East tower Lift-3 cross bracing gusset plate to skin'E' WD – GUSA3 – 3 – 99M – E. Welder is identified as 040365. ZPMC Quality Control (QC) Inspector is identified Fu Wei Min. The welding variables recorded by QC appeared to comply with the WPS – B – P – 2214 – Tc – U5b – FCM. (See attached photo)

Weld joint #4B located on West tower Lift-3 cross bracing gusset plate to skin'E' WD – GUSA3 – 3 – 109M – W. Welder is identified as 052910. ZPMC Quality Control (QC) Inspector is identified Fu Wei Min. The welding variables recorded by QC appeared to comply with the WPS – B – P – 2214 – Tc – U5b – FCM.

## BAY#10

This QA Inspector observed the following work in progress Shielded Metal Arc Welding (SMAW):

## WELDING INSPECTION REPORT

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Weld joint # 03 located on North tower Lift-5 Grillage Assembly NSD1 – TL5 – 3B/F. Welder is identified as 066261. ZPMC Quality Control (QC) Inspector is identified as Yu Zhi Lai. The welding variables recorded by QC appeared to comply with the WPS -B - T - 3213 - TC - U4c.

Weld joint #35 located on North tower Lift-5 Grillage Assembly NSD1 – TL5 – 3B/F. Welder is identified as 066422. ZPMC Quality Control (QC) Inspector is identified as Yu Zhi Lai. The welding variables recorded by QC appeared to comply with the WPS -B - T - 3213 - TC - U4c.

Fluxcored Arc Welding (FCAW):

Weld joint # 12 located on Façade Seal Angle ND1 – SFSA3 – 313. Welder is identified as 052075. ZPMC Quality Control (QC) Inspector is identified as Jiang Xiao Bo. The welding variables recorded by QC appeared to comply with the WPS -B - P - 2132.

#### **BAY#11**

This QA Inspector observed the following work in progress

Shielded Metal Arc Welding (SMAW):

Weld joint # 2A located on East tower Lift-5 Grillage Assembly ESD1 – TL5 – 2B/F. Welder is identified as 040611. ZPMC Quality Control (QC) Inspector is identified as Ma Qian Li. The welding variables recorded by QC appeared to comply with the WPS -B - T - 3213 - TC - U5b.

Weld joint # 15A located on West tower Lift-5 Grillage Assembly WSD1 – TL5 – 4B/F. Welder is identified as 067993. ZPMC Quality Control (QC) Inspector is identified as Ma Qian Li. The welding variables recorded by QC appeared to comply with the WPS -B - T - 3213 - TC - U5b.

Weld joint # 14 located on East tower Lift-5 Grillage Assembly ESD1 – TL5 – 2B/F. Welder is identified as 040610. ZPMC Quality Control (QC) Inspector is identified as Ma Qian Li. The welding variables recorded by QC appeared to comply with the WPS -B - T - 3313 - TC - P5.

#### ORTHOTROPIC BOX GIRDER (OBG) AT BAY#11

This QA Inspector observed the following work in progress

Fluxcored Arc Welding (FCAW):

Weld joint # 05 located on Edge Plate EP3030A – 001. Welder is identified as 040759. ZPMC Quality Control (QC) Inspector is identified as Ma Qian Li. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2132.

Weld joint # 09 located on Edge Plate EP3030A – 001. Welder is identified as 046706. ZPMC Quality Control (QC) Inspector is identified as Ma Qian Li. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2132. (See attached photo)

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

# WELDING INSPECTION REPORT

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## **Summary of Conversations:**

No Relevant Conversations.

## **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Michael Ng - 15921845703, who represents the Office of Structural Materials for your project.

Inspected By:	Kumar,Sandeep	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer